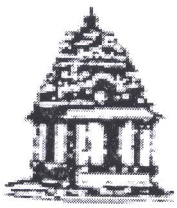


BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: VIDYARANYAPURA

Name of Work: *Estimate for Improvements of Roads and Drains at HMT Layout, Thindlu, Virupakshapura and surrounding area in Ward No. 09 (Vidyaranyapura).*

Job Code: 009-21-000005

PCode: P-3798

Estimated Cost Rs. 100.00 Lakhs

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of the work: **Estimate for Improvements of Roads and Drains at HMT Layout, Thindlu, Virupakshapura and surrounding area in Ward No. 09 (Vidyaranyapura).**

	009-21-000005	P-3798					Estimate Cost:	10000000.00
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 143 / Item No. 19.1, PWD SR 2018-19**	Cum							
	Desilting of Drain								
	HMT Layout 4th Block 15th Cross Road		2	215.00	0.45	0.45	87.08		
	HMT Layout 4th Block 14th Cross Road		2	148.00	0.45	0.45	59.94		
	HMT Layout 4th Block 5th Cross Road		2	93.00	0.45	0.45	37.67		
	Berm Cutting								
	HMT Layout 4th Block 15th Cross Road		2	215.00	1.00	0.20	86.00		
	HMT Layout 4th Block 14th Cross Road		2	148.00	0.90	0.20	53.28		
	HMT Layout 4th Block 5th Cross Road		2	93.00	1.00	0.20	37.20		
	RCC Drain								
	HMT Layout 4th Block 6th Cross Road		2	147.00	1.00	1.00	294.00		
	HMT Layout 5th Block 6th Cross Road		2	170.00	1.00	1.00	340.00		
			1	20.00	1.00	1.00	20.00		
	Culverts		5	8.00	2.00	1.20	96.00		
	Basic Rate	130.00					**1111.16**	243.88	**270990.00**
	Area Weightage @6%	7.80							
	Total	**137.80**							
	Add loading and unloading Charges **It No 17.1 KSRRB M 100-1**	68.00							
	Average weight of earth 1.28 tonne / kg for 11.90 Km = 1.28 T X 11.90Km X 2.5 / km= 38.08	38.08							
	Total	**243.88**							
2	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6 with with OPC cement @ 220kgs, with crushed 40mm** and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications MORTH Specification No. 2100 **Item No. 27.18 Page No. 222, PWD SR 2018-19**	cum							
	Culverts		5	8.00	2.00	0.15	12.00		
	RCC Drain								
	HMT Layout 4th Block 6th Cross Road		2	147.00	1.00	0.15	44.10		
	HMT Layout 5th Block 6th Cross Road		2	170.00	1.00	0.15	51.00		
			1	20.00	1.00	0.15	3.00		
	Basic Rate	5115.00					**110.10**	5421.90	**596951.00**
	Area Weightage @ 6%	306.90							
	Total	**5421.90**							
	Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6, edges of stones** chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. **Page No. 255, Item No. 34.9, PWD SR 2018-19**	cum							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
			2x5	8.00	0.60	0.45	21.60		
			2x5	8.00	0.45	0.45	16.20		
	Basic Rate	5483.00					**37.80**	5811.98	**219693.00**
	Area Weightage @ 6%	328.98							
	Total	**5811.98**							
4	Providing and laying in position **plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size** graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page. No. 255 / Item No.34.11 of PWD SR 2018-19**	cum							
	Coping		5	8.00	1.50	0.10	6.00		
	Ramp		2x5	8.00	1.20	0.15	14.40		
	Basic Rate	5283.00					**20.40**	5599.98	**114240.00**
	Area Weightage @ 6%	316.98							
	Total	**5599.98**							
5	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. – do – cement mortar 1:4 **Page. No. 255 / Item No.34.12.1 of PWD SR 2018-19** CM 1:4	sqm							
	Pointing		2x5	8.00		0.90	72.00	149.46	10761.12
	Basic Rate	97.00	141.00				**72.00**	102.82	**7403.00**
	Area Weightage @ 6%	5.82							
	Total	**102.82**	14946						
6	Providing laying palin / reinforced cement concrete for side drains using M 20 nominal mix concrete with OPC at 300 kgs with 20 mm and down size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed well compacted for walls and bottom including cenmtering shuttering form work etc. complete as per approved drawing and design MORTH Specification No. 1500,1700,2200 Wall & Bottom thickness 15cm **Page No. 271, Item No. 37.59.2, PWD SR 2018-19**	Cum							
	Bottom Concrete								
	HMT Layout 4th Block 6th Cross Road		2	147.00	0.90	0.15	39.69		
	HMT Layout 5th Block 6th Cross Road		2	170.00	0.90	0.15	45.90		
			1	20.00	0.90	0.15	2.70		
	Side Wall								
	HMT Layout 4th Block 6th Cross Road		2x2	147.00	0.15	0.60	52.92		
	HMT Layout 5th Block 6th Cross Road		2x2	170.00	0.15	0.60	61.20		
			2	20.00	0.15	0.60	3.60		
	Basic Rate	6670.00					**206.01**	7070.20	**1456532.00**
	Area Weightage @ 6%	400.20							
	Total	**7070.20**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
7	Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. **TMT bars Fe 500 Page No. 229 / Item No. 28.8.2, PWD SR 2018-19**	Tonne							
	For RCC Drain @ 60 Kg / Cum		0.06	206.01			**12.36**	72326.98	**894005.00**
	Basic Rate	68233.00							
	Area Weightage @ 6%	4093.98							
	Total	**72326.98**							
8	Providing **precast slab of 100mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge - Data rate	Sqm							
	Missing Slab		2	147.00	0.90		264.60		
			2	170.00	0.90		306.00		
			1	20.00	0.90		18.00		
							588.60	2337.00	**1375558.00**
9	Providing **precast slab of 250mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - Data rate	Sqm							
			13x5	1.50	0.60		58.50		
							58.50	5418.00	**316953.00**
10	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete **Page No. 27 / Item No. 5.30 PWD SR 2018-19**	No							
			2	147.00			653		
				0.45					
			2	170.00			756		
				0.45					
			1	20.00			44		
				0.45					
	Basic Rate	408.00					**1453**	432.48	**628538.00**
	Area Weightage @ 6%	24.48							
	Total	**432.48**							
	KSRB 15-19.1 : Providing and applying ready mix priming coat **over concrete** / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications. **Page No. 124 / Item No. Item No. 15.80, PWD SR 2018-19**	Sqm							
			2	147.00		0.40	117.60		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
			2	170.00		0.40	136.00		
			1	20.00		0.40	8.00		
							261.60	39.22	**10260.00**
	Basic Rate	37.00							
	Area Weightage @ 6%	2.22							
	Total	**39.22**							
2	KSRB 15-19.2 : Providing and applying spray painting in two coats (excluding priming coat) over concrete / masonry / asbestos cement sheet / plastered surfaces with flat wall paint of approved brand to give even shade after cleaning the surface of all dirt, dust and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.**Page No. 124 / Item No. Item No. 15.81, PWD SR 2018-19**	Sqm							
			Qty Vide Item No. 11				**261.60**	90.10	**23570.00**
	Basic Rate	85.00							
	Area Weightage @ 6%	5.10							
	Total	**90.10**							
3	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **Page No. 146 / Item No. 19.55 PWD SR 2018-19**	Sqm							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60		1204.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00		888.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00		558.00		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60		823.20		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60		952.00		
							4425.20		
	Consider 35% of the Total Qty						**1548.82**	95.40	**147757.00**
	Basic Rate	90.00							
	Area Weightage @ 6%	5.40							
	Total	**95.40**							
4	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **Page No. 155 / Item No. 20.18, PWD SR 2018-19**	Cum							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60	0.25	301.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00	0.25	222.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00	0.25	139.50		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60	0.25	205.80		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60	0.25	238.00		
							1106.30		
	Consider 35% of the Total Qty						**387.21**	2001.28	**774906.00**
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	**2001.28**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
15	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **Page No. 158 / Item No. 21.6, PWD SR 2018-19**	Sqm							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60		1204.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00		888.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00		558.00		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60		823.20		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60		952.00		
							4425.20		
	Consider 35% of the Total Qty						**1548.82**	29.68	**45969.00**
	Revised Rates as on 01-07-2020 Basic Rate	28.00							
	Area Weightage @ 6%	1.68							
	Total	**29.68**							
16	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen **Page No. 160 / Item No. 21.17.6, PWD SR 2018-19**	Cum							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60	0.05	60.20		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00	0.05	44.40		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00	0.05	27.90		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60	0.05	41.16		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60	0.05	47.60		
							221.26		
	Consider 35% of the Total Qty						**77.44**	6407.70	**496219.00**
	Revised Rates as on 01-07-2020 Basic Rate	6045.00							
	Area Weightage @ 6%	362.70							
	Total	**6407.70**							
17	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **Page No. 158 / Item No. 21.2, PWD SR 2018-19**	Sqm							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60		1204.00		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00		888.00		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00		558.00		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60		823.20		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60		952.00		
	Basic Rate	5.00					**4425.20**	5.30	**23454.00**

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Area Weightage @ 6%	0.30							
	Total	**5.30**							
18	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **Page No. 158 / Item No. 21.7 PWD SR 2018-19**	Sqm							
	Revised Rates as on 01-07-2020 Basic Rate		Qty Vide Item No. 17				4425.20		
	asper Revised Basic Rate	12.00					**4425.20**	12.72	**56289.00**
	Area Weightage @ 6%	0.72							
	Total	**12.72**							
19	KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen Page No. 162 / Item No. 21.22.6, PWD SR 2018-19**	Cum							
	HMT Layout 4th Block 15th Cross Road		1	215.00	5.60	0.04	48.16		
	HMT Layout 4th Block 14th Cross Road		1	148.00	6.00	0.04	35.52		
	HMT Layout 4th Block 5th Cross Road		1	93.00	6.00	0.04	22.32		
	HMT Layout 4th Block 6th Cross Road		1	147.00	5.60	0.04	32.93		
	HMT Layout 5th Block 6th Cross Road		1	170.00	5.60	0.04	38.08		
	Revised Rates as on 01-07-2020 Basic Rate	6939.00					**177.01**	7355.34	**1301954.00**
	Area Weightage @ 6%	416.34							
	Total	**7355.34**							
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **Page No. 182, Item No. 24.15 PWD SR 2018-19**	Sqm							
	Centre Line								
	HMT Layout 4th Block 15th Cross Road		0.5	215.00	0.10		10.75		
	HMT Layout 4th Block 14th Cross Road		0.5	148.00	0.10		7.40		
	HMT Layout 4th Block 5th Cross Road		0.5	93.00	0.10		4.65		
	HMT Layout 4th Block 6th Cross Road		0.5	147.00	0.10		7.35		
	HMT Layout 5th Block 6th Cross Road		0.5	170.00	0.10		8.50		
	Sides								
	HMT Layout 4th Block 15th Cross Road		2	215.00	0.10		43.00		
	HMT Layout 4th Block 14th Cross Road		2	148.00	0.10		29.60		
	HMT Layout 4th Block 5th Cross Road		2	93.00	0.10		18.60		
	HMT Layout 4th Block 6th Cross Road		2	147.00	0.10		29.40		
	HMT Layout 5th Block 6th Cross Road		2	170.00	0.10		34.00		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Revised Rates as on 01-07-2020 Basic Rate	429.00					193.25	454.74	87879.00
	Area Weightage @ 6%	25.74							
	Total	454.74							
	Sub Total								8849120.00
	GST 12%								1061894.00
	For PMC Report @ 1%								88491.00
	Miscellaneous and other Charges	L/S							495.00
								Total	10000000.00

Rupees One Crore Only

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

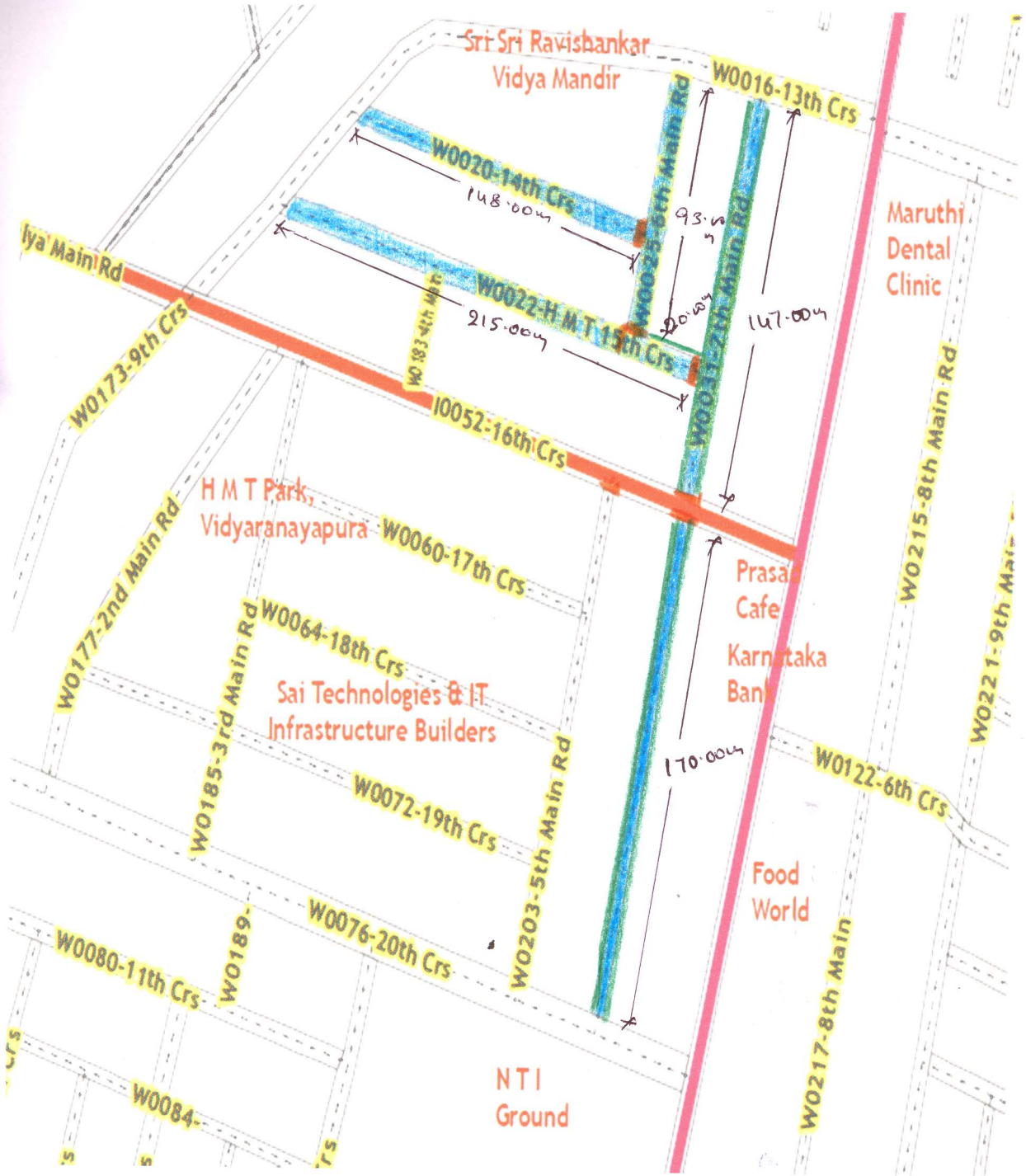
Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division
25/08

Technically sanctioned for Rs. 100.00 Lakhs
Rs in Words HUNDRED LAKH ONLY
Under P 3798
Job Code No 009-21-00005
Registered as SE(Y)/TS/ 20 /2021 subject to conditions contained in enclosed memo No 20 /20-21 Dated:
9/9/2020

ADMINISTRATIVE APPROVAL
Accorded For Rs. 100.00 Lakhs only
Head of A/c P3798
Div. Ref. No. B2 Date 04/09/2020
AE
EE(BTP)
11/09

Name of the work: Improvements of Roads and Drains at HMT Layout, Thindlu, *Virupakshapura and surrounding area in Ward No. 09 (Vidyaranyapura).*



Index:

- Culverts
- CC Drain
- Asphalt Road

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97